Proposed Creation of Special Management Area

Overview

The concentration of homes and businesses using septic systems in the Clancy area, combined with the area's geology and groundwater movement, have led to elevated nitrate levels in the groundwater. In some areas nitrate concentrations in the groundwater are above or close to the state standard of 10 mg/l. Elevated nitrate levels in ground and surface water threaten the public's health, in addition to the health of the environment. Nitrate is a concern because it can harm public health (can cause methemoglobinemia or blue baby syndrome). Nitrate can also degrade surface water (Prickley Pear and Clancy Creek) because it acts as a fertilizer and can cause rampant algae and aquatic plant growth. Excess algae or too many plants can affect the oxygen levels in surface water, raise water temperatures and cause fish to die. Due to the risks to human and environmental health, the EPA and the State of Montana have enacted laws defining the maximum allowable concentrations of nitrate in state waters to protect the quality of water.

Objective

Most conventional septic systems are not considered effective in removing nitrogen without additional treatment in the soil. Areas that might not be suitable for conventional systems are those with nearby nutrient-sensitive waters, high densities of existing conventional systems, highly permeable or shallow soils, and shallow water tables, all of which are present in the Clancy area. Advanced treatment systems can improve nitrogen removal up to 75 percent. Other potential measures to consider for reducing the nitrates range from requiring individual advanced treatment systems when existing septic systems fail, requiring functioning septic systems be replaced with advanced treatment systems by a certain date, and initiating a maintenance program.

Discharging nitrate to groundwater at levels that may cause or contribute to degradation of state water quality is in violation of 75-5-301 MCA. The Health Board has the authority and responsibility under 50-2-116 MCA to adopt necessary regulations for the control and disposal of sewage. To ensure new or increased septic system use will not degrade state water, designating the Clancy area as a Special Management Area is recommended in addition to implementing a maintenance program for existing systems. These regulations may restrict the ability for property owners to use or develop their property if they are unable to show their proposed use will not cause or contribute to a violation of Federal and State water quality standards.

Proposal

The following Special Management Area designation is proposed to be inserted in Jefferson County Onsite Wastewater Treatment Regulations:

<u>Clancy Special Management Area.</u> The following restrictions apply to land located in Sections 4, 9 and 16 of Township 8 North, Range 3 West, further described as being within the boundaries of the Clancy Water and Sewer District (See Appendix E).

(1) New or increased use may not be approved unless the Department determines it will not cause or contribute to a violation of the nitrate standard established in 75-5-301, MCA.

- (2) The Department will evaluate septic permit applications on a case-by-case basis, using the best information available including, but not limited to, nitrate sample results and existing studies on groundwater flow direction. The Department may require an applicant to supply additional information to substantiate groundwater will be protected.
- (3) Provided there has been no unapproved increased use, replacement systems may be allowed in this area providing additional nitrate removal from effluent can be achieved.

Establishing a septic maintenance program in the Special Management Area is also recommended as a long-term option for protecting public health and water quality. Many of the septic systems in this area are old and may not work properly. They have the potential to contaminate the groundwater and create a health hazard for those relying on it for drinking purposes. Periodically inspecting and pumping septic tanks helps determine if systems are functioning properly and filtering disease causing pathogens out of the wastewater. Not only does this protect the public from diseases transmitted through wastewater but also protects the quality of groundwater and extends the life of the system. The following maintenance program for the area described in Appendix E is also proposed to be inserted in Jefferson County On-site Wastewater Treatment Regulations:

<u>Maintenance.</u> Owners/occupants of property within the Special Management Area are required to participate in a maintenance program.

- (1) Within 45 days of written notice from the Department, the owner/occupant shall provide documentation of the results of an inspection and septic tank pumping by a licensed septage hauler.
- (2) Maintenance inspections must be performed at an interval not to exceed four (4) years.
- (3) The owner/occupant of an onsite wastewater treatment system with deficiencies must repair or replace the system as required in Section 4 of these regulations.
- (4) In accordance with Section 8 of these regulations a valid permit may be required prior to repairing, replacing or altering an existing system.
- (5) Failure to comply with the written notice subjects the owner/occupant to enforcement provisions outlined in Section 16 of these regulations.

Execution

Although the proposed regulations are not more stringent than comparable state regulations, a public hearing and comment period are recommended to provide interested persons the opportunity to submit comments prior to the Health Board making a final decision. In accordance with 7-1-2121 MCA, publication of notice for the public hearing must be published twice, with at least 6 days separating each publication.

Conclusion

The Health Board has the authority and responsibility to protect the public from conditions of public health importance, including through actions to ensure the removal of contaminants that might adversely affect public health. The Board also has the authority to adopt necessary regulations for the control and disposal of sewage. Adoption of the proposed insertions will demonstrate effort on the Board's part toward requiring compliance with Federal and State water quality standards.

APPENDIX E

E1	Legal Description of Clancy Water And Sewer District
F2	Man of District Boundaries

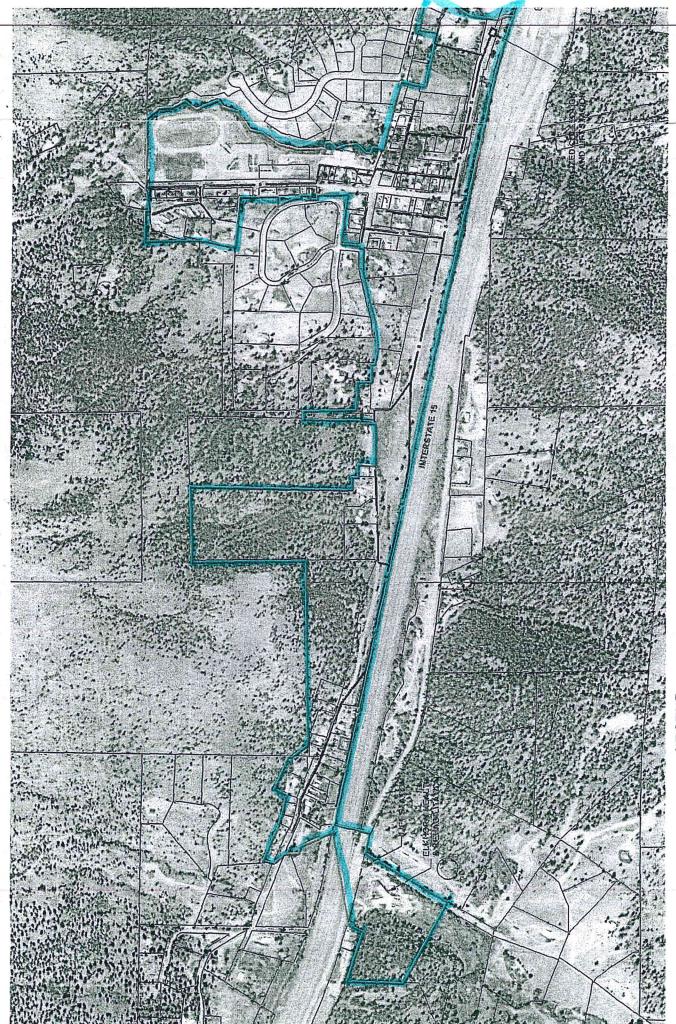
LEGAL DESCRIPTION OF PROPOSED CLANCY WATER AND SEWER DISTRICT, JEFFERSON COUNTY, MONTANA.

Situated in sections 4, 9, & 16, Township 8 North, Range 3 West, Principal Meridian of Montana, Jefferson County, Montana. All Certificates of Survey (hereafter referenced as "COS"), Book and Page references, document references, and Deed references herein noted are from the official records of the Clerk & Recorder of Jefferson County, Montana more particularly described as follows, to wit:

Beginning at the Northwest 1/16th corner of Section 9, the True Point of Beginning; Thence North along the West line of Parcel #2 as shown on COS # 113125 to the Northwest corner of said Parcel #2; Thence East along the North line to the Northeast corner of Parcel 2; Thence Northwesterly along the West line, to Northwest corner of Lot 2, Block 15 Haynes Addition No.2, COS # 113339; Thence Northwesterly along that course of a Deed to Randy Anderson, document # 209433 that reads " N 56°16'28" W" to the most Southwesterly corner of that Deed recorded in Book 104, Page 242; Thence Northerly along the Westerly line of said Deed to the Southwesterly corner of COS # 190225; Thence Easterly along the South line of said COS to the Southeast corner of that Tract described as "Remainder"; Thence Northeasterly along the East side of sald Remainder Tract to Southeast and Northeast corners respectively of that Parcel identified as Lot 1, COS# 206919 (also known as Red Cliff Estates); Thence: Southeasterly to the Southwesterly & Southeasterly corners respectively of that Parcel identified as Tract A-1, COS #193663; Thence Northeasterly along the East Line of Tracts A-1 and B-1 said COS to the Northeast corner of Tract B-1; Thence Westerly along the North line of said Tract B-1 to the Northwest corner of said Tract B-1; Thence along the Westerly side of Tracts E-1 and F (still as defined by COS # 193663) to the Northwest corner of said Tract F; Thence Easterly along South line of that Parcel described as "Remainder" on COS # 206919 to the most Southeast corner of said Remainder Tract, said point also being the Westerly Right-Of-Way Line for Interstate 15; Thence Southerly along said Westerly Right-Of-Way to the Southeast corner of Tract F-1 as described in COS # 232883; Thence Southwesterly to the Northeasterly corner of Tract A COS # 194765; Thence Southerly along the Eastern line and Westerly along the Southerly line of said Tract A to the Northeast corner of Tract B, also in COS #194765; Thence Southerly along the Eastern line to Said Tract B's most Southeasterly corner; Thence Easterly along the Northern line of Tract A-1-A, COS # 215524 to the Northeast corner of said Tract which is the West line of Interstate I-15; Thence Southerly along the West Line of Interstate I-15 to the Southeasterly corner of Tract D, COS # 160450; Thence Easterly, crossing Interstate I-15 to the Southwest corner of Tract 6, COS # 104879; Thence Easterly and Southerly along the Southerly boundary of said Tract 6 to the Westerly line of Tract 5, said COS; Thence Southerly along the Westerly line of Tract 5 to the Northwest corner of Tract 1 COS # 103049; Thence in a clockwise direction around the boundaries of said Tract 1, Easterly to the Northeast corner, Southerly to the Southeast corner, Westerly to the most Southerly West corner, Northerly along the West Boundary, and Westerly to the most Westerly Southern corner of said Tract 1; Thence Northwesterly, crossing Interstate I-15 to the Most Easterly Southern Corner of Lot 1, COS # 196516; Thence Following the Southern boundaries of said Lot 1

Southwesterly, Southerly, and Westerly to the Southwest corner of Lot 1; Thence Southwesterly to the Southeast corner of the Parcel Deed recorded in Book 127, Page 784; Thence in a clockwise direction around said Deeded Parcel Westerly, and then Northerly to the Northwest corner of said Deed Parcel which is also on the South line of that Parcel Shown in COS #110723; Thence Westerly to the Southwest corner of said Parcel, thence Northerly To the Northeast Corner of said Parcel; Thence Northerly along the Westerly line of that Parcel described in Book 82, Page 357 to the Northwest corner of said Deed description, also being the Southwest corner of that Parcel shown as "ESLICK" in COS # 110880; Thence Westerly along the South line, and Northerly along the West line to the Northwest corner of the ESLICK Parcel, said point also being the Southwest corner of the Larson Parcel as shown on said COS; Thence Northerly along the West Line of the Larson Parcel to the Northwest corner of said Parcel; Thence Easterly along the North line of the Larson Parcel to the Southwest corner of Parcel No. 3 as described on a Warranty Deed recorded as document # 217702; Thence Northeasterly along the Western line of said Parcel No. 3 to the intersection of said Parcel No.3 with the West line of the Parcel shown in COS #155124 as a retracement for W. W. Wall; Thence Northerly along the West line of the Wall Parcel to the Northwest Corner of said Wall Parcel, also being the Southwest corner of Government Lot 6; Thence Northerly along the West Boundary of Government Lot 6 to the Northwest corner of said Lot 6 and the Southern Boundary of Tract C as shown on COS # 227628; Thence clockwise along the boundary of said Tract C Westerly to the Southwest corner, Northerly to the Northwest corner, Easterly along the North boundary to the most Westerly Southeast corner of Tract A as shown on COS #199630; Thence following the East Boundary of said Tract A Northerly along the Eastern boundary, Easterly along a Southern boundary; Northerly along an Eastern boundary, and Easterly along a Southern boundary to the most Northerly Southeast corner of Said Tract A, also being the Westerly boundary of Interstate I-15; Thence Northerly along the Western Boundary of said Tract A and Interstate 1-15 to the most Easterly North corner of Said Tract A; Thence leaving the western boundary of Interstate I-15 Westerly along the North line of Said Tract A to the most Southwesterly Northeast corner; Thence Northerly to the most Northwesterly Northeast corner of said Tract A, also being on the South line of Government Lot 5; Thence Westerly along the common lines of Tract A and Government Lot 5 to the Southwest corner of said Lot 5; Thence Northerly along the Western boundary of Lot 5 to the Northwest corner of Lot 5; Thence Easterly along the Mid Section line of Section 9 to the Southwest corner of that Tract B as shown on COS # 125705A; Thence along the boundaries of said Tract B Northerly to the Northwest corner and Easterly to the Northwest corner of said Tract B, also being the Southwest corner of the Parcel shown as "Remainder" in COS # 143688; Thence along the West line of the remainder Parcel Northerly, Easterly, and Northerly again to the Southwest corner of that Parcel shown as Tract A COS# 143668; Thence Northerly along the West line of Tract A to the Southeast corner of that Plat entitled "Plat of Clancy Hills Subdivision" as recorded in document # 134224: Thence Northerly following the entire Eastern boundary of said subdivision to most Northerly Northeast corner; Thence continuing along the entire North boundary of said subdivision Westerly to the Northwest corner of said Subdivision; Thence continuing Southerly along the West side of said subdivision of a point on the West side of Lot 2, said point also being the Southeast corner of that Parcel shown in COS # 134740; Thence Westerly along the South line to the Southwest corner of said Parcel, also being the Southeast corner of that land conveyed by a Deed recorded in Book DOC2, Page 39; Thence along the South line of said Deed to the most Southerly East corner of Parcel A as shown on COS # 157623; Thence along the South line of said Parcel

A to the Southeast corner of that Parcel described as #2 in COS # 113125; Thence along the South line of said Parcel #2 to the Northwest $1/16^{th}$ corner of Section 9, and the place of beginning.



LEGEND

DISTRICT BOUNDARY

SEWER COLLECTION PIPE